

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Uwe BOTTCHER

Examiner: Nguyen, Phong H.

Serial No: 10/519,528

Group/Art Unit: 3724

Filing Date: December 27, 2004

Docket: 821-65

For: AN ARRANGEMENT AND A METHOD
FOR CLAMPING THIN RODS

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

DECLARATION

Sir:

I, Uwe Bottcher, do hereby declare:

1. I am the inventor of the subject matter being claimed in the above-identified application;
2. I have read and understand the Final Office Action mailed April 1, 2009 by the Patent and Trademark Office in the above-identified application and the art being applied, namely U.S. Pat. No. 5,395,101 to Takimoto et al, U.S. Pat. No. 5,842,622 to Mansfield et al and U.S. Pat. No. 6,668,128 to Hattori et al;
3. Cleaving optical fiber precisely perpendicularly to longitudinal fiber axis has previously been difficult because the vibrating cleaving blade can unduly intrude into and damage the fiber being cut, detracting from quality. For example, the vibrating cleaving blade can continue to strike the fiber after severing the same, damaging the flat, cleaved surfaces of the fiber. Torsional stress applied upon clamping the fiber for cutting, can result in cleaving occurring at an angle up to 45° with respect to the fiber longitudinal axis, as opposed to the desired 90° angle. Clamping faces for the fiber also wear out over time, it having been difficult to ensure proper replacement and orientation of such clamping faces to facilitate cleaving the fiber at the optimal 90° angle to longitudinal;



4. The present invention explicitly eliminates these disadvantages and improves effective cleaving of optical fibers. Referring to the drawings in the present application, these benefits are achieved by, among other features, arranging clamping member 22 for the optical fiber rod 3 in a guide 44 such that the clamping member 22 can be removed from the guide by pushing or lifting, fixing at least one 21 of the clamping members for the rod 3 to a framework of the clamping arrangement, means 1 for clamping the rod 3 in a second clamping location (in addition to the rod 3 being clamped in a first clamping location) and movable 12 in the direction of the longitudinal axis of the rod 3 to longitudinally tension the rod 3 and a V-grooved 23 clamping member 22 movable towards and away from an opposite flat-faced clamping member 21 by compressed air driving means 19 contacting the movable clamping member at an end opposite the V-groove face 23;
5. The combination of art fashioned in the Final Office Action mailed April 1, 2009, does not suggest to me, one skilled in the art, making the invention claimed in the above-identified application, for the following reasons;
6. Takimoto et al do not teach a guide for receiving a movable clamping member. It is stated in paragraph 5 of the Final Office Action "Mansfield teaches a guide for receiving a clamp so that the clamp can be replaced. See Fig. 11." However, Fig. 11 of Mansfield et al does not show any provision of a "guide" on cleaver 33. In fact, Fig. 10 of Mansfield et al show clamp 28 being secured to hammer 38 in the absence of any guide. Accordingly, if I, one skilled in the art, considered Takimoto et al and Mansfield et al in combination, I would be lead away from including a guide in the invention being claimed herein;
7. In Hattori et al, holder 2 having V-groove 2b is positioned underneath optical fiber 1 while clamping member 7 is positioned above optical fiber 1 and compressed toward V-groove 2b by spring member 8 against portion 4b (column 6, lines 52-58). Accordingly, Hattori et al fail to show spring member 8 contacting a grooved clamping member on a side or end opposite the grooved clamp face. In Takimoto et al pneumatic drive means 14a, 14b fail to contact a grooved clamping member on a side or end opposite the grooved clamp face (e.g., slotted member 1). Therefore, even if I, one skilled in the art, considered the teachings of Hattori et al and Takimoto et al in combination, I would not be lead to provide compressed air drive means 19 contacting grooved clamping member 22 on a side or end opposite the grooved clamp face 23, to attain the benefits set forth above; and



8. I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

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Date

M. Böttcher
Uwe Bottcher

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